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10/004,952	12/05/2001	Yves Schabes	401122.0004	8503

77027   7590   05/12/2010
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03/25/2010</u>.
2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>75-99</u> is/are pending in the application.
　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) <u>75-99</u> is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
　　a) ☐ All　b) ☐ Some * c) ☐ None of:
　　　　1. ☐ Certified copies of the priority documents have been received.
　　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.
　　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
　　　　　　application from the International Bureau (PCT Rule 17.2(a)).
　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

03/25/2010 has been entered.

    Claims canceled: 1-74.

    Claims amended: None.

    New claims: 75-99.

    Claims pending: 75-99.

Claim Objections

2.   Claim 92 is objected to because of the following informalities: Claims 92, status

identifier should be new not previously presented.. Appropriate correction is required.

35 USC § 101

3.   The method as recited in claim(s) 1 will be interprets and give a specific meaning

to the recited method which the methods perform by a computer including a processor

and memory having instructions execute by the processor to perform and negating any

embodiment which expressly disclose the methods is an mental or abstract idea or

method will be perform without a computer and any other methods do not fall within the

definition of 35 U.S.C 101.

Response to Arguments

4.   Applicant's argument filed on 03/25/2010 has been fully reviewed and new

ground of rejection in view of the applicant's argument is provided below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

5.   Claims 75 to 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Trower, II et al. (Patent No. 6,922,810 B1) in view of (Pub. No. US 2002/0002547 A1).

As to 75, (New) Trower discloses a method of fulfilling an information need

comprising:

receiving a query pertaining to the information need, the query comprised of a

fully specified term and a partially unspecified term wherein the partially unspecified

term is representative of a matching restriction designed to meaningfully restrict the

query results (for example what is %symbol%+ trading at …) (col. 10, lines 20-26);

processing the query against a plurality of information containing documents to

determine a query match based on the presence of the fully specified term and the

presence of a match to the matching restriction of the partially unspecified term within a

document, wherein the order of the fully specified term with respect to the match to the

matching restriction of the partially unspecified term need not be in the same order as

the query (the rules grammar 220 can include variable in addition to wildcards.

Variables are similar to wildcards in that they can be matched by any user input...) (col.

10, lines 1-7); and

returning a result that includes the matching portion of the document in which a

query match was determined (the rules grammar 220 can include variable in addition to

wildcards. Variables are similar to wildcards in that they can be matched by any user

input...) (col. 10, lines 1-7).

Trower does not explicitly disclose the method as recited is a query for retrieval

data; However, SAKO discloses query retrieval using morphological analysis (according

to the above process, for example, if the morphological analysis result sown in FIG. 17

is input, the word "Jurassic World" is extracted as keywords, and the retrieval condition

for retrieving the retrieval character sequence "director" and "director of Jurassic World"

is prepared, as shown in FIG. 20) (paragraph 0142). This suggests of the concept of

search and retrieving of word such as director and Jurassic Work is a noun as a

morphological restriction. Therefore, it would have been obvious to one ordinary skill in

the art at the time of the invention was made to modify Trower to include concept of

search and retrieving of word such as director and Jurassic Work is a noun as a

morphological restriction as disclosed SAKO in order to retrieve data as accustomed to

user need.

    As to claim 76, (New) Trower discloses the method of claim 75, further

comprising:

    identifying documents that contain the partially unspecified term in an index;

identifying contexts within the index in accordance with the query wherein the index

includes pre-analyzed contexts of terms appearing within the plurality of information

containing documents (for example what is %symbol%+ trading at ...) (col. 10, lines 20-

26);

    converting the query into a finite state automaton (FSA) (for example what is

%symbol%+ trading at ...) (col. 10, lines 20-26); and

    matching the finite state automaton (FSA) against the identified contexts(for

example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 77, (New) Trower discloses the method of claim 76, wherein the finite state automaton (FSA) is a finite state transducer (FST) (computer) (col. 2, lines 49-52).

As to claim 78, (New) Trower discloses the method of claim 76, wherein the finite state automaton (FSA) allows for the appearance of fully specified and at least partially unspecified terms in any order in a potential matching context (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 79, (New) Trower discloses the method of claim 76, wherein the finite state automaton (FSA) allows for one or more intervening words between the fully specified and at least partially unspecified terms in a potential matching context (for example what is %symbol%+ trading at ...) (col. 10, lines 20-26).

As to claim 80, (New) Trower discloses the method of claim 76, wherein the contexts are stored as finite state automatons (FSAs) (computer) (col. 2, lines 49-52).

As to clam 81, (New) Trower discloses the method of claim 76, wherein the documents are accessible over the Internet (internet) (col. 4, lines 35-41).

As to claim 82, (New) Trower discloses he method of claim 76, wherein the documents comprise World Wide Web Pages (internet) (col. 4, lines 35-41).

As to claim 83, (New) Trower discloses the method of claim 75 further comprising assigning a score to the query match (score module) (col. 10, lines 55-67).

As to claim 84, (New) Trower discloses the method of claim 83 wherein the score reflects the number of times an instance of the query match is located among the plurality of documents (for example what is %symbol%+ trading at …) (col. 10, lines 20-26).

As to claim 85, (New) Trower discloses the method of claim 84 further comprising ranking the documents that contain a query match based on a number of times the query match is located within a document (score module) (col. 10, lines 55-67).

As to claim 86, (New) Trower discloses the method of claim 75 wherein the partially unspecified term includes a syntactic or a morphological restriction (grammar rules) (col. 16-40).

As to claim 87, (New) Trower discloses the method of claim 76 wherein the index comprises locations of terms within documents (for example what is %symbol%+ trading at …) (col. 10, lines 20-26).

As to claim 88, (New) Trower discloses the method of claim 87 further comprising: determining the location of a term in the query within a document using the

index; and locating a query match for the query based on the location of the term within

the document (for example what is %symbol%+ trading at …) (col. 10, lines 20-26).

As to claim 89, (New) Trower discloses the method of claim 88 further comprising

ranking a plurality of the located matches or portions thereof (scoring module) (col. 10,

lines 55-67).

As to claim 90, (New) Trower discloses the method of claim 89 wherein the

ranking is based on one or more features selected from the list consisting of: the

location of a match within a document, a weight assigned to a document that contains a

match, the age of a document that contains a match, the source of a document that

contains a match, and a format feature of a match within a document (scoring module)

(col. 5, lines 67).

As to claim 91, (New) Trower discloses the method of claim 75 wherein the query

includes a delimiter indicating a first portion of the query for which a relative order is

preserved for one or more terms included in the first portion, the relative order being in

accordance with a physical position of each term in the first portion with respect to any

other terms in the first portion (for example what is %symbol%+ trading at …) (col. 10,

lines 20-26).

As to claim 92, (Previously Presented) Trower discloses the method of claim 75 that wherein the matching restriction includes a morphological criteria (grammar rules) (col. 10, lines 1-7).

As to claim 93, (New) Trower discloses the method of claim 92 that wherein the morphological criteria includes one of a noun, verbal noun, adjective, conjunction, pronoun, adverb, verb, transitive verb, intransitive verb, verb in past tense, verb in present tense, verb in future intense, present participle of a verb, past participle of a verb, and gerund (grammar rules) (col. 10, lines 1-7).

As to claim 94, (New) Trower discloses the method of claim 75 that wherein the matching restriction includes a syntactical criteria (grammar rules) (col. 10, lines 1-7).

As to claim 95, (New) Trower discloses the method of claim 94 that wherein the syntactical criteria includes one of a noun phrase, verb phrase, prepositional phrase, adverbial phrase, and adjectical phrase (grammar rules) (col. 10, lines 1-7).

As to claim 96, (New) Trower discloses the method of claim 75 that wherein the matching restriction includes a definable category (grammar rules) (col. 10, lines 1-7).

As to claim 97, (New) Trower the method of claim 75 wherein the matching restriction includes a criteria defined in accordance with a determination by a computer

program (instructions program stored in (Memory, ROM and RAM) (col. 3, lines 48-50

and col. 3, lines 65-67).

98. (New) Trower discloses a computer readable medium (Memory, ROM and

RAM) (col. 3, lines 48-50 and col. 3, lines 65-67) storing a computer program product

for fulfilling an information need, the computer readable medium comprising:

computer program code for receiving a query pertaining to the information need,

the query comprised of a fully specified term and a partially unspecified term wherein

the partially unspecified term is representative of a matching restriction designed to

meaningfully restrict the query results (col. 10, lines 1-7) (for example what is

%symbol%+ trading at ...) (col. 10, lines 20-26);

computer program code for processing the query against a plurality of

information containing documents to determine a query match based on the presence of

the fully specified term and the presence of a match to the matching restriction of the

partially unspecified term within a document, wherein the order of the fully specified

term with respect to the match to the matching restriction of the partially unspecified

term need not be in the same order as the query (the rules grammar 220 can include

variable in addition to wildcards. Variables are similar to wildcards in that they can be

matched by any user input...); and

computer program code for returning a result that includes the matching portion

of the document in which a query match was determined (the rules grammar 220 can

include variable in addition to wildcards. Variable are similar to wildcards in that they
can be matched by any use input…) (col. 10, lines 1-7).

Trower does not explicitly disclose the method as recited is a query for retrieval
data; However, SAKO discloses query retrieval using morphological analysis (according
to the above process, for example, if the morphological analysis result sown in FIG. 17
is input, the word "Jurassic World" is extracted as keywords, and the retrieval condition
for retrieving the retrieval character sequence "director" and "director of Jurassic World"
is prepared, as shown in FIG. 20) (paragraph 0142). This suggests of the concept of
search and retrieving of word such as director and Jurassic Work is a noun as a
morphological restriction. Therefore, it would have been obvious to one ordinary skill in
the art at the time of the invention was made to modify Trower to include concept of
search and retrieving of word such as director and Jurassic Work is a noun as a
morphological restriction as disclosed SAKO in order to retrieve data as accustomed to
user need.

As to claim 99, (New) Trower discloses the computer readable medium of claim
98, further comprising:

computer program code for identifying documents that contain the partially
unspecified term in an index, the index including pre-analyzed contexts of terms
appearing within the plurality of documents (col. 10, lines 1-7) (for example what is
%symbol%+ trading at …) (col. 10, lines 20-26); and

computer program code for identifying contexts within the index in accordance
with the query, the index including preanalyzed contexts of terms appearing within a

plurality of documents(col. 10, lines 1-7) (for example what is %symbol%+ trading at …)

(col. 10, lines 20-26);

computer program code for converting the query into a finite state automaton

(FSA) (col. 10, lines 1-7) (for example what is %symbol%+ trading at …) (col. 10, lines

20-26); and

computer program code for matching the finite state automaton (FSA) against the

identified contexts(col. 10, lines 1-7) (for example what is %symbol%+ trading at …)

(col. 10, lines 20-26).

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-

4041, or unofficial fax number for the purpose of discussion (571) 273-4041 or via e-

mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-

Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 305-

3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is

assigned are as follow:

(571) 273-8300 [Official Communication]

/Baoquoc N To/

Primary Examiner, Art Unit 2162